

Maryland Department of Agriculture



**MD Nutrient Management Update
MACCA Summer Meeting June 26, 2014**

New Regulations and Other Issues

PMT Update

Setbacks

Stream Fencing

No Nutrient, No Crop Zones

Manure Incorporation

AIRs and Implementation Reviews

Enforcement Action

Enhanced Nutrient Management

Regulations and Issues Continued

Temporary Stockpiling

Training and Field Days

Stream Identification

Mapping Tool?

Alternative BMPs

Flash Grazing

Urban Update

Complaints

PMT Update

MDA Contracted with Salisbury University to conduct an economic impact study.

Preliminary findings due in July and the final report will be issued in September.

Study will involve interested stakeholders who will form advisory panels.

The plan still involves a phased-in approach.

STREAM PROTECTION - *Coming soon to a farm near you*

It's good for your livestock and stream, and it's required beginning January 1, 2014!

Stream Fencing:

- Fence designs are flexible
- Fences can be simple
- Technical assistance and cost-share funding are available

Setbacks

Establishes no crop, no nutrient buffers.

Minimum of 10' if using directed application.

Minimum of 35' if using broadcast method.

Animals will be excluded from the setback.

Flash Grazing will be allowed if needed.

Nutrient Application Setbacks

Setback applies:

- Natural and perennial or intermittent
- Channelized and perennial and;
 - Floodplain soil map unit, or
 - Hydric soil map unit, or
 - “B” slope or greater soil

Setback does not apply:

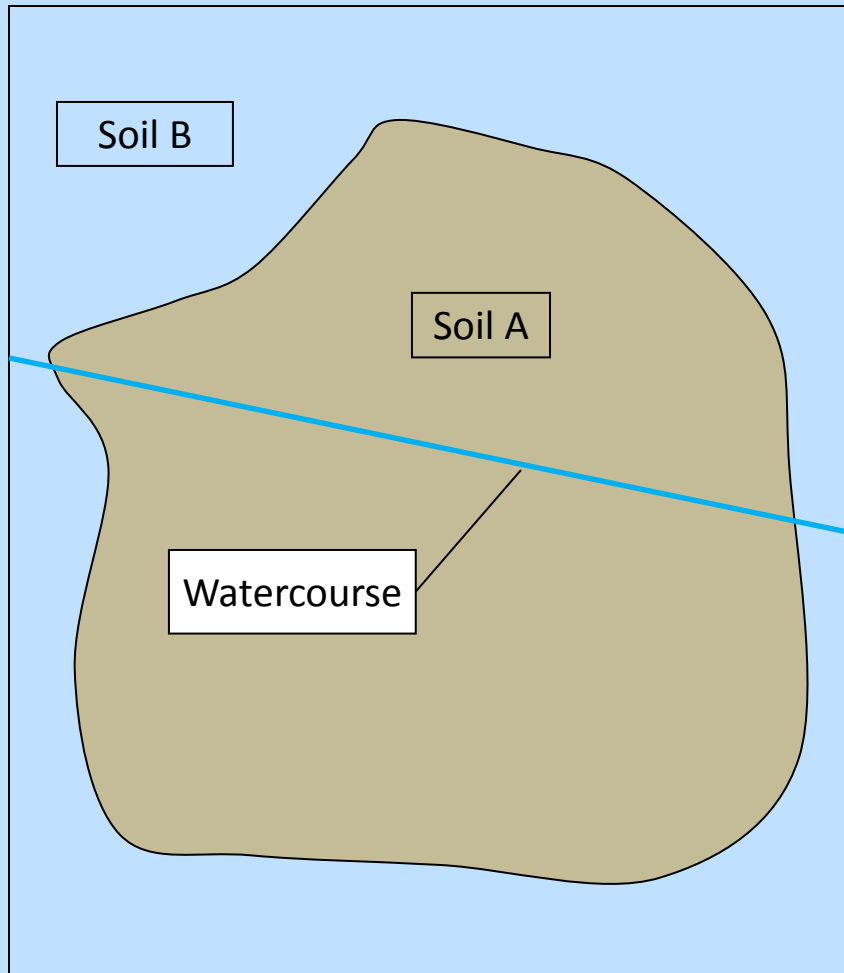
- Ditches
 - Channelized and intermittent
 - Ephemeral

Understanding Nutrient Application Setbacks

If the watercourse is:	It is defined as a:	For crop and pasture land adjacent to the watercourse, the setbacks requirements:
Natural <u>and</u> either perennial or intermittent	Stream	Apply
Channelized <u>and</u> perennial <u>and</u> ; A. Lies within a floodplain soil map unit, or B. Lies within a hydric soil map unit “mapped as a narrow, elongated feature in a fluvial (stream-like)/floodplain position, or C. Lies within a “B” slope or greater soil	Stream	Apply
Channelized and intermittent	Ditch	Do Not Apply
Ephemeral (natural or channelized)	Ditch	Do Not Apply



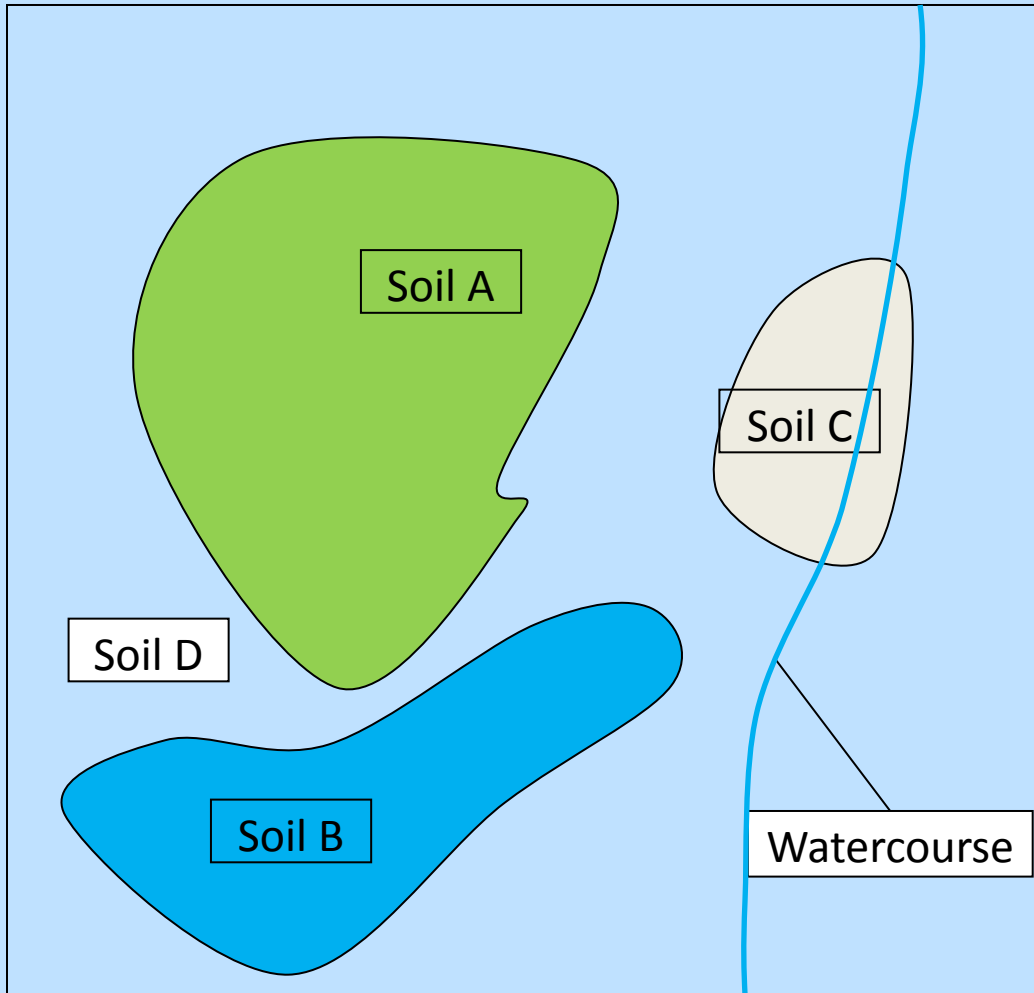
Nutrient Application Setbacks



- Watercourse is constructed drainage;
- Soil A is not hydric;

In this case, setbacks requirements do not apply

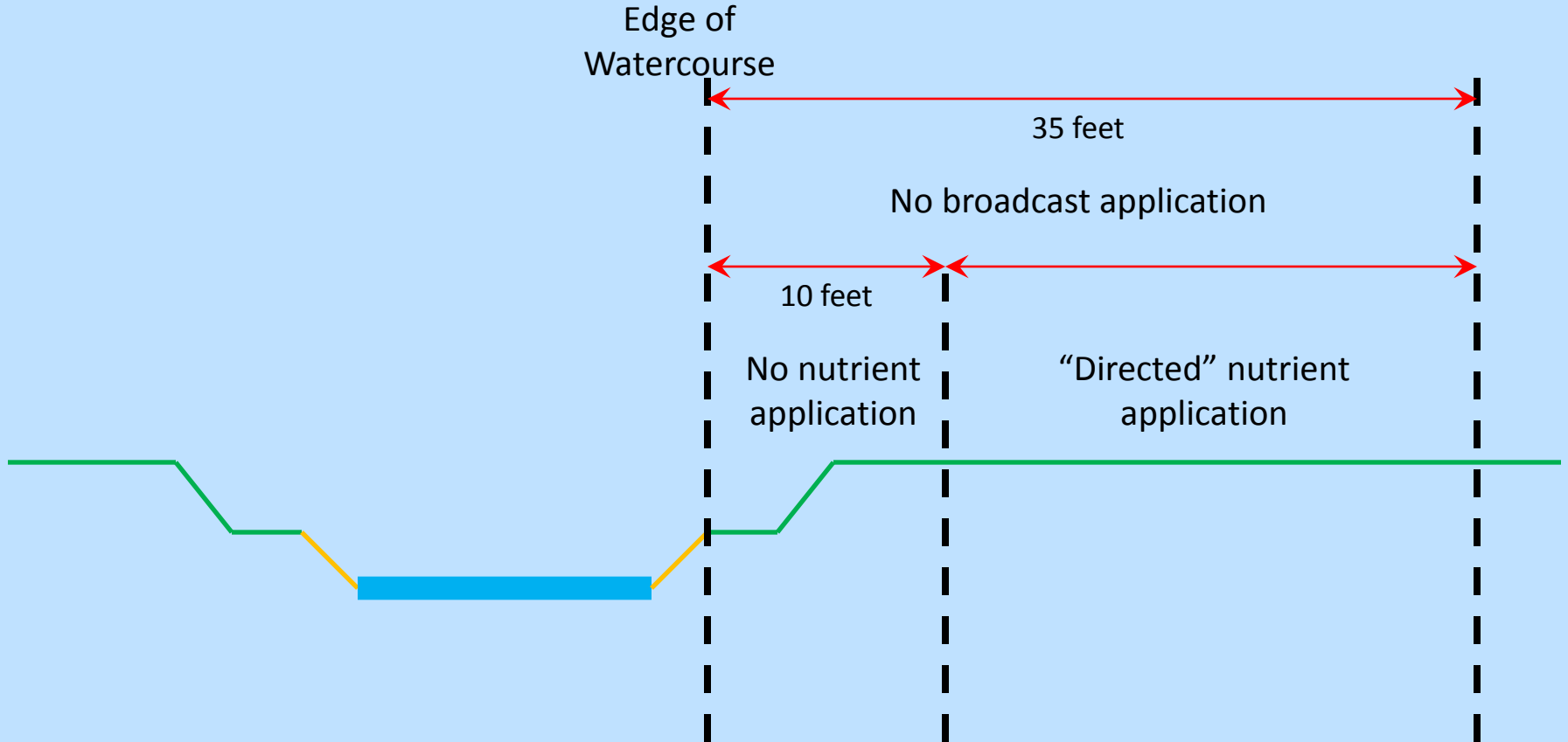
Nutrient Application Setbacks



- Watercourse is natural and intermittent;
- Soil C is hydric;

In this case, setbacks apply

Nutrient Application Setbacks



Manure Incorporation

Manure must be incorporated within 48 hours

Exceptions include HEL land, pasture and hay ground, and provisions written into a conservation plan that restrict tillage.

No exceptions for winter application- the regulations require incorporation if non-stackable manure is applied in the winter.













Annual Implementation Reports (AIRs) for crop year 2013

5009 AIRs were sent out to non-CAFO farms.

553 CAFO AIRs were sent out.

About 1100 warning letters mailed 4/22.

What can we do to encourage farmers to fill out their AIRs accurately and completely?

AIR data is extremely important to MD agriculture. MDA has seen some challenges of our numbers, so we need accuracy!

Implementation Reviews

Random Reviews

AIR Inconsistencies and Questions

Water Quality Complaints Related to
NM, usually referred by Area Office
Operators no longer needing a Plan

Enforcement

What are the 2 most common reasons why farmers face enforcement action?

Over application of nutrients?

Timing issues?

Failure to submit AIR?

Expired NM Plans?

Missed site visit for review?

Spreading manure on snow?

Setbacks, incorporation?

Enhanced Nutrient Management

Is there a future for enhanced NM in MD and if so what practices are best suited to our farms and farmers?

What can we do individually and jointly to promote these practices?

Aside from current grant funded projects, are there additional projects we could/should promote?

If we concentrate efforts to this concept, will farmers see value?

TEMPORARY FIELD STOCKPILING FOR ORGANIC NUTRIENT SOURCES

General Provisions (Abbreviated Version)

- 1. When other immediate use options and alternatives are not available, temporary field stockpiling (staging) of organic nutrient sources is allowed.**
 - Temporary field stockpiling (staging) provides greater environmental protection than a fall or winter application of nutrients or applying nutrients too far ahead of normal planting time and crop uptake.**
- 2. Existing storage shall be fully used prior to stockpiling material in the field.**
- 3. Any material staged in field stockpile shall be land applied in the first spring season following the placement of the stockpile.**
- 4. Materials shall be field stockpiled (staged) temporarily in a manner that prevents nutrient runoff.**

Plan Now for Additional Waste Storage Needs

2016- No winter spreading allowed for farms with more than 50 animal units.

2020- No winter spreading allowed for anybody including the smaller farms.

We will allow stockpiling of solid manure, but that should be considered temporary.

Flash Grazing

Flash Grazing will be allowed as an alternative BMP associated with an approved Pasture Management Plan.

The time that animals spend Flash Grazing should be measured in hours and not days, as determined by the Pasture Plan.

A temporary fence should be installed along the stream bank to prevent degradation and contamination of the water.

Scenario 1

The farm is divided into paddocks.

There is a permanent fence installed 10' from the stream bank.

There is a second fence, a temporary electric fence, that is located just 4" from the stream bank and serves to restrict animal access during flash grazing.



Temporary Fence
4' off stream edge

10' - 20' Grass
Buffer

Permanent Stream
Fencing

Wetlands

Wetlands

Stream

Stream Fencing

10' - 20' Grass Buffer

Stream Fencing

Stream

Stream

Permanent Stream
Fencing

Temporary Fence
4' off stream edge

Scenario 2

This is the same farm and the same photo as seen in Scenario 1. In this case the only fence will be the permanent fence which will be a minimum of 10' from the stream but may be much more if needed due to floodplain.

Without the temporary fence animals have access to the stream, but this theory believes the animals will graze lush grass provided by a freshly rotated paddock and will graze until they are removed from the paddock.

Temporary Fence
4' off stream edge

10' - 20' Grass
Buffer

Permanent Stream
Fencing

Wetway

Wetway

Stream

Stream Fencing

10' - 20' Grass Buffer

Stream Fencing

Stream

Stream

Permanent Stream
Fencing

Temporary Fence
1' off stream edge



Scenario 3

The farm is again divided into paddocks. There is no permanent fence for the setback. In this scenario there is a temporary fence along the stream bank only which allows the animals access to the setback area, not water. The theory we are following is that the grass in a properly rotated pasture program will attract the animals away from the setback primarily because the setback is the farthest distance from the travel lane access point.



Scenario 4

In this photo the farm has a permanent fence all the way around the pasture and allows a setback from the stream.

The pasture is not divided and is in continuous pasture, although well maintained.

The setback is not divided and is all one area or paddock. There is a temporary fence 4" from the stream bank, but the entire setback area would have to be grazed at the same time.



Fence line edge

Non-rotational

Pasture

Grazing

Stream

Stream

Stream

Temporary 4" off stre

The SCD must agree that the proposed Flash Grazing placed in a Pasture Management Plan is appropriate. MDA will monitor the results to be sure the practice meets the intent of the regulation.

Urban Update

Referred to as “Turfgrass Nutrient Management Program”

As of June 15th there were 1147 individuals certified and 445 business licenses issued and more each week

Renewals will be due by 6/30/15

We have added a second specialist to work with field reviews

They are working to contact businesses that we believe need to be certified and have not yet done so

Complaints

Working cooperatively with the SCD and MDA Area Coordinators to investigate water quality complaints and assess the need for action

We have not yet finalized a plan for how to handle violations of the setback requirement

Some farmers state their displeasure that they are in compliance and other farmers are not as related to numerous issues, primarily stream fencing and manure management

On-Going Programs

Cover Crop signup begins June 24th

Manure Transport Program

Manure Matching Service

Income Tax Subtraction

Manure Injection/Incorporation

Nutrient Trading Program

Ag. Certainty Program

RFP for Manure Technology Projects

Maryland Department of Agriculture



Dwight Dotterer
NM Program Administrator
410-841-5877